



P030D

Ignition B Control Signal Circuit/Open

P030D indicates that the powertrain control module (PCM) has detected an open circuit in the ignition control signal circuit for the ignition coil or module designated as 'B'. This means the PCM is not receiving the expected electrical feedback or is unable to command the ignition coil to fire, which can cause a misfire or a no-start condition.

SYSTEM	CODE TYPE	SEVERITY	FIX DIFFICULTY	AREA
Powertrain	Generic (all makes)	Medium	Intermediate	Ignition system and misfire

Symptoms you may notice

- Illumination of the check engine light, often with no other noticeable symptoms
- Engine misfire, which may feel like a stumble, hesitation, or rough running
- Reduced engine power or limp mode in some vehicles
- Difficulty starting or a no-start condition if the circuit is completely open
- Poor fuel economy or increased emissions

Common causes, most likely first

- 1 Open or damaged wire in the ignition control signal circuit (e.g., broken wire, corroded connector)
- 2 Faulty ignition coil or ignition control module for cylinder 'B'
- 3 Poor electrical connection at the ignition coil or PCM connector
- 4 Failed PCM driver for the ignition control circuit (rare)
- 5 Aftermarket alarm or remote start system improperly wired into the ignition circuit
- 6 Rodent damage to wiring harness

How to diagnose and fix it

- 1 Perform a visual inspection of the ignition coil 'B' connector and wiring for damage, corrosion, or loose pins
- 2 Check for technical service bulletins (TSBs) related to this code for your specific vehicle
- 3 Use a scan tool to command the ignition coil 'B' on and off while listening for a clicking sound or checking for spark
- 4 Measure resistance of the ignition coil 'B' primary and secondary circuits and compare to specifications
- 5 Check for continuity and voltage drop on the ignition control signal circuit between the PCM and the ignition coil 'B'
- 6 If the circuit tests good, swap the ignition coil 'B' with a known-good coil from another cylinder to see if the misfire moves
- 7 If the coil and wiring are good, test the PCM driver with an oscilloscope or replace the PCM as a last resort



Before you replace the ignition coil

- A loose or corroded connector at the ignition coil is a far more common cause of P030D than a failed coil itself, so always inspect and clean the terminals first.
- The code can be set by a faulty crankshaft position sensor or camshaft position sensor if the PCM loses the reference signal it uses to time the ignition control pulse.
- Aftermarket remote start or alarm systems that tap into ignition wires often introduce resistance or opens that trigger this code, especially if the installation was rushed.
- On some vehicles, a weak battery or poor ground can cause the PCM to misreport an open circuit, so check battery voltage and ground connections before condemning the PCM.
- P030D is often accompanied by misfire codes for the same cylinder, but the presence of a misfire code does not confirm the coil is bad; the circuit must be tested.

Can I keep driving with P030D?

If the vehicle is running smoothly with only the check engine light on, you can drive it cautiously to a repair shop, but avoid heavy acceleration or towing. If the engine is misfiring, running rough, or lacks power, stop driving and have it towed to prevent catalytic converter damage.

Tools that help

- OBD-II scan tool with live data and bidirectional control
- Digital multimeter
- Oscilloscope (optional but helpful for signal analysis)
- Test light
- Wire repair kit (soldering iron, heat shrink, crimpers)
- Factory service information for wiring diagrams and specifications

Reading P030D

P	Powertrain: engine, transmission and emissions.
0	Generic (SAE) code: it means the same thing on every OBD-II vehicle.
3	Ignition system and misfire.
0D	The exact fault within that area.

Often seen with

P0300 Random/Multiple Cylinder Misfire Detected · **P0301** Cylinder 1 Misfire Detected · **P0302** Cylinder 2 Misfire Detected · **P0351** Ignition Coil A Primary/Secondary Circuit Malfunction · **P0352** Ignition Coil B Primary/Secondary Circuit Malfunction



See it working

Watch the animated explainer **Four-Stroke Engine Cutaway: Intake to Exhaust** on Auto Veteran to see the parts involved moving.

Full guide, related articles and animations: <https://www.autoveteran.tech/dtc-codes/p030d/>

